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EXAMINER	
PHAM, HUNG Q	
ART UNIT	**PAPER NUMBER**
2169	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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MN

Office Action Summary	Application No.	Applicant(s)	
	10/631,369	GARGI ET AL.	
	Examiner	Art Unit	
	HUNG Q. PHAM	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The current application has been re-assigned to Examiner Hung Pham and this Office Action is a Non-Final Office Action in view of new grounds of rejection.

Election/Restrictions

Applicant's petition under 37 CFR 1.181 with respect to the Examiner's Restriction Election 07/23/07 is acknowledged. The Restriction/Election has been withdrawn and all claims are hereby examined.

Allowable Subject Matter

The indicated allowability of claims 6 and 7 as in the Interview 07/23/2007 is withdrawn in view of the newly discovered reference(s) to Graham et al. (Time as Essence for Photo Browsing Through Personal Digital Libraries). Rejections based on the newly cited reference(s) follow.

Duplicate Claims, Warning

Applicant is advised that should claim 7 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22, 32 and 51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 22, 32 and 51 direct to system comprising software per se. Software per se is not a series of steps or acts and thus is not a process. Software per se is not a physical article or object and as such is not a machine or manufacture. Software per se is not a combination of substances and therefore is not a composition of matter. Software per se is not one of the four categories of invention and therefore claims 22, 32 and 51 are not statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 33, 36 and 51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the new claimed limitation ***the measure of object density corresponding to a measure of distribution of distances separating adjacent ones of the objects in the current object cluster measured in the selected dimension of the context-related metadata*** as amended was not described in the Specification.

Regarding claim 33, the new claimed limitation ***without graphically presenting representations of unelected ones of the constituent objects of the cluster*** as amended was not described in the Specification.

Regarding claim 36, the new claimed limitation ***presenting the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters*** as amended was not described in the Specification.

Regarding claim 51, the new claimed limitation ***without graphically presenting representations of unelected ones of the constituent objects of the cluster*** and ***presenting the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters*** as amended was not described in the Specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 33, the clause *the constituent objects of the clusters* references to other items in the claim. It is unclear what item is being referenced.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19, 21-37, 39-49 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Graham et al. [Time as Essence for Photo Browsing Through Personal Digital Libraries].

Regarding claims 1 and 22, Graham teaches a method and system for *organizing a collection of objects arranged in a sequence ordered in accordance with a selected dimension of context-related metadata respectively associated with the objects* (A collection of images arranged

in is sorted with respect to time as *a selected dimension of context-related metadata respectively associated with the objects* (Page 4[1], Col. 2[2] Lines 4-5)), comprising:

classifying the objects in the sequence to generate a series of object clusters, wherein the classifying comprises sequentially processing each of the objects as a respective candidate for segmentation into a respective current one of the object clusters in the series and, for each of the candidate objects (A series of object cluster as in Fig. 4 (Page 5) is generated according to classifying technique as disclosed on Page 4, Col. 2 Lines 3-18),

determining a candidate object interval separating the candidate object from an adjacent object in the sequence already segmented into the current object cluster, the candidate object interval being measured in the selected dimension of the context-related metadata (As further disclosed by Graham, for each image in the sorted list, time interval of two consecutive images is determined, the time interval separates two consecutive images, wherein one is a candidate image and one is an adjacent image in a current cluster (Page 4, Col. 2 Lines 3-18). The time interval as disclosed by Graham is considered as being equivalent to *candidate object interval separating the candidate object from an adjacent object in the sequence already segmented into the current object cluster*. The time interval is measured in time as *selected dimension of context-related metadata respectively associated with the objects*),

comparing the candidate object interval to a weighted measure of cluster extent for the current object cluster, the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata (Every time two consecutive photographs differ by more than a specified constant time difference, e.g., 1 hour difference, a new cluster is created and the current image is added to the most recently created cluster (Page 4, Col. 2 Lines 3-28). The Graham's teaching as discussed indicates the step of *comparing the candidate object interval*, e.g., time interval of two consecutive images, *to a weighted measure of cluster extent for the current object*

[1] *The first page of the reference is considered as page 1.*

cluster, e.g., a specified constant time difference, *the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata*, e.g., the 1 hour difference spanned by all images in the current cluster), and

comparing the candidate object interval to a weighted measure of object density for the current object cluster, the measure of object density corresponding to a measure of distribution of distances separating adjacent ones of the objects in the current object cluster measured in the selected dimension of the context-related metadata (During clustering, the rate at which photographs were taken within a cluster is considered. For instance, while taking a hike through a forest, someone may take a picture every couple of minutes. In contrast, when photographing a newborn baby for the first time, the time between pictures is likely to be in seconds. Different rates are taken into account by comparing each pair of consecutive photographs to the basic photographic rate of the cluster. When a pair with a time difference that appears to be outside the normal range for the cluster, a new cluster is created (Page 4, Col. 2 Lines 33-54). The Graham's teaching as discussed indicates the step of *comparing the candidate object interval to a weighted measure of object density for the current object cluster*, e.g., time interval of two consecutive images is compared with basic photographic rate of the cluster, *the measure of object density corresponding to a measure of distribution of distances separating adjacent ones of the object in the current object cluster measured in the selected dimension of the context-related metadata*, e.g., the basic photographic rate of the cluster such as 5 sec between two consecutive photographs is a measure of distribution of distances separating the images adjacent to the current image in the cluster).

Regarding claim 2, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses ***the measure of cluster***

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[2] *The left column of the page is col. 1 and the right column of the page is col. 2.*

extent for each current object cluster corresponds to a temporal distance spanned by recorded generation times associated with all objects in the current object cluster (Page 4, Col. 2 Lines 3-28).

Regarding claim 3, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses *the measure of cluster extent for each current object cluster corresponds to a spatial distance spanned by recorded generation locations associated with all objects in the current object cluster* (Page 3, Col. 2 Line 36-Page 4, Col. 1 Line 2).

Regarding claim 4, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses *the measure of object density for each current object cluster corresponds to an average temporal distance separating adjacent objects in the current object cluster* (Page 4, Col. 2 Lines 33-54).

Regarding claim 5, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses *the measure of object density for each current object cluster corresponds to an average spatial distance separating adjacent objects in the current object cluster* (Page 4, Col. 2 Lines 33-54).

Regarding claim 6, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses *the classifying comprises merging consecutive ones of the candidate objects into a current one of the object clusters until the candidate object interval determined for a current one of the candidate objects exceeds the weighted measure of cluster extent for the current cluster, at which point a successive one of the object clusters in the series is initiated with the current candidate object* (Page 4, Col. 2 Lines 3-28).

Regarding claim 7, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses ***the classifying comprises merging consecutive ones of the candidate objects into a current one of the object clusters until the candidate object interval determined for a current one of the candidate objects exceeds the weighted measure of object density for the current object cluster, at which point a successive one of the object clusters in the series is initiated with the current candidate object*** (Page 4, Col. 2 Lines 33-54).

Regarding claims 8 and 9, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses ***the processing comprises determining the weighted measures of cluster extent by applying to the measures of cluster extent respective weights that decrease with increasing sizes of the respective object clusters*** (Page 3, Col. 2 Lines 1-10).

Regarding claim 10, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses the step of ***customizing at least one of the weights applied to the measures of cluster extent based on an analysis of objects in the corresponding object cluster*** (Page 4, Col. 2 Lines 19-28).

Regarding claim 11, Graham teaches all of the claimed subject matter as discussed above with respect to claim 10, Graham further discloses the step of ***scaling at least one of the weights applied to the measures of cluster extent based on a fractal dimension estimate of recorded time generation meta data associated with the objects in the collection*** (Page 5, Col. 1 Lines 8-15).

Regarding claim 12, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses the step of ***customizing***

at least one of the weights applied to the measures of cluster object density based on an analysis of objects in the corresponding object cluster (Page 5, Col. 2 Lines 8-15).

Regarding claim 13, Graham teaches all of the claimed subject matter as discussed above with respect to claim 12, Graham further discloses the step of *scaling at least one of the weights applied to the measures of cluster extent based on a fractal dimension estimate of recorded time generation meta data associated with the objects in the collection* (Page 5, Col. 1 Lines 8-15).

Regarding claim 14, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses the step of *comparing the object density of a candidate object cluster consisting of the current object cluster and the candidate object with the weighted measure of object density for the current object cluster* (Page 4, Col. 2 Lines 33-54).

Regarding claim 15, Graham teaches all of the claimed subject matter as discussed above with respect to claim 14, Graham further discloses *the measure of object density for each current object cluster corresponds to an average temporal distance separating adjacent objects in the current object cluster* (Page 4, Col. 2 Lines 33-54).

Regarding claim 16, Graham teaches all of the claimed subject matter as discussed above with respect to claim 14, Graham further discloses *the measure of object density for each current object cluster corresponds to an average spatial distance separating adjacent objects in the current object cluster* (Page 4, Col. 2 Lines 33-54).

Regarding claim 17, Graham teaches all of the claimed subject matter as discussed above with respect to claim 14, Graham further discloses ***the measure of object density for each object cluster corresponds to a moving average distance separating adjacent objects in the current object cluster*** (Page 4, Col. 2 Lines 33-54).

Regarding claim 18, Graham teaches all of the claimed subject matter as discussed above with respect to claim 14, Graham further discloses the step of ***determining the weighted measures of cluster extent by applying to the measures of cluster extent respective weights that decrease with increasing sizes of the respective object clusters*** (Page 3, Col. 2 Lines 1-10).

Regarding claim 19, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses the step of ***processing each of the candidate objects sequentially beginning at a first end of the object sequence*** (Page 4, Col. 2 Lines 3-18).

Regarding claim 21, Graham teaches all of the claimed subject matter as discussed above with respect to claim 1, Graham further discloses ***the sequence to be segmented includes objects of the following types: text, audio, graphics, still images, video and business events*** (Abstract).

Regarding claims 23 and 32, Graham teaches a method of organizing a collection of objects, comprising:

segmenting objects from the collection into clusters (Page 4, Col. 2 Lines 3-54);

extracting context-related meta data associated with the objects and parsable into multiple levels of a name hierarchy (Page 5, Col. 1 Lines 16-28); and

assigning names to clusters based on the extracted context-related meta data corresponding to a level of the name hierarchy selected to distinguish segmented clusters from one another (Page 2, FIG. 1a and 1b).

Regarding claim 24, Graham teaches all of the claimed subject matter as discussed above with respect to claim 23, Graham further discloses ***names are assigned to clusters based on the extracted context-related meta data corresponding to a highest level of the name hierarchy that distinguishes clusters from each other*** (Page 5, Col. 1 Lines 16-28 and FIG. 1a).

Regarding claim 25, Graham teaches all of the claimed subject matter as discussed above with respect to claim 23, Graham further discloses ***the context-related meta data corresponds to object generation times*** (Page 4, Col. 2 Lines 3-54).

Regarding claim 26, Graham teaches all of the claimed subject matter as discussed above with respect to claim 23, Graham further discloses ***the context-related meta data corresponds to object generation locations*** (Page 4, Col. 2 Lines 33-42).

Regarding claim 27, Graham teaches all of the claimed subject matter as discussed above with respect to claim 26, Graham further discloses ***the context-related meta data corresponds to recorded information relating to country, city, and state of object generation*** (Page 4, Col. 2 Lines 33-42).

Regarding claim 28, Graham teaches all of the claimed subject matter as discussed above with respect to claim 23, Graham further discloses ***the context-related meta data corresponds to both object generation times and object generation locations*** (Page 3, Col. 2 Line 36-Page 4, Col. 1 Line 2).

Regarding claim 29, Graham teaches all of the claimed subject matter as discussed above with respect to claim 23, Graham further discloses the step of ***automatically naming objects in a given cluster based on the name assigned to the given cluster*** (Page 5, Col. 1 Lines 16-28 and FIG. 1a-b).

Regarding claim 30, Graham teaches all of the claimed subject matter as discussed above with respect to claim 29, Graham further discloses ***the objects in the given cluster are named automatically in accordance with a chronological ordering of the objects in the given cluster*** (Page 5, Col. 1 Lines 16-28 and FIG. 1a-b).

Regarding claim 31, Graham teaches all of the claimed subject matter as discussed above with respect to claim 29, Graham further discloses the step of ***storing objects in the given cluster in a tree structure organized by cluster and labeled in accordance with the assigned names*** (FIG. 4 and 1a-b).

Regarding claim 33, Graham teaches a method of organizing a collection of objects, comprising:

accessing a sequence of objects segmented into clusters each including multiple constituent objects arranged in a respective sequence in accordance with context-related meta data associated with the objects (Page 5, Col. 2 Lines 35-47);

selecting for each object cluster at least two constituent objects representative of beginning and ending instances in the corresponding object sequence (Page 5, Col. 2 Lines 42-47); and

in a user interface, graphically presenting the selected representative objects of each cluster without graphically presenting representations of unselected ones of the constituent objects of the clusters (The process of creating summaries as discussed on Page 5, Col. 2 Lines 42-47 is displayed similarly as in FIG. 1a-b).

Regarding claim 34, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses the step of *graphically presenting a selected one of the clusters as a stack of partially overlapping images representative of multiple objects in the selected cluster* (FIG. 1a-b).

Regarding claim 35, Graham teaches all of the claimed subject matter as discussed above with respect to claim 34, Graham further disclose the step of *revealing an increased portion of a given one of the representative images in the stack in response to detection of a user-controlled display icon positioned over the given representative image* (FIG. 1a-b).

Regarding claim 36, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses the step of *presenting the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters* (Page 5, Col. 5 Lines 35-47).

Regarding claim 37, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses the step of *merging*

objects of one cluster into an adjacent cluster in response to user input (Pages 3-4, Calendar Browser).

Regarding claim 39, Graham teaches all of the claimed subject matter as discussed above with respect to claim 37, Graham further discloses *the objects of the one cluster are merged into the adjacent cluster in response to user selection of an icon for merging the clusters* (Pages 3-4, Calendar Browser).

Regarding claim 40, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses the step of *presenting a graphical representation of distributions of objects in the clusters* (FIG. 1a-b).

Regarding claim 41, Graham teaches all of the claimed subject matter as discussed above with respect to claim 40, Graham further discloses *object distribution for a given cluster is presented as object instances plotted along an axis corresponding to a scaled representation of the context-related extent spanned by the given cluster* (FIG. 5).

Regarding claim 42, Graham teaches all of the claimed subject matter as discussed above with respect to claim 40, Graham further discloses the step of *splitting a given cluster in response to user selection of a point in the representation of the object distribution presented for the given cluster* (FIG. 5).

Regarding claim 43, Graham teaches all of the claimed subject matter as discussed above with respect to claim 40, Graham further discloses the step of *automatically splitting a given cluster into two or more clusters in response to user input* (FIG. 5).

Regarding claim 44, Graham teaches all of the claimed subject matter as discussed above with respect to claim 43, Graham further discloses ***the given cluster is automatically split into a user-selected number of sub-clusters*** (FIG. 5 and Page 5, Col. 2 Lines 14-47).

Regarding claim 45, Graham teaches all of the claimed subject matter as discussed above with respect to claim 43, Graham further discloses ***the given cluster is automatically split based on relative sizes of intervals between successive objects in the given cluster*** (Page 4, Col. 2 Lines 3-84).

Regarding claim 46, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses ***the context-related meta data corresponds to object generation times*** (Page 4, Col. 2 Lines 3-18).

Regarding claim 47, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses ***the context-related meta data corresponds to object generation locations*** (Page 3, Col. 2 Line 36-Col. 3 Line 2).

Regarding claim 48, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses ***the segmented sequence includes objects of the following types: text, audio, graphics, still images, video, and business events*** (Page 4, Col. 2 Lines 3-18).

Regarding claim 49, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, Graham further discloses the step of ***graphically presenting at least one link to an object of a cluster arranged in a sequence in accordance with time-related meta data in a calendar format*** (FIG. 1a-b).

Regarding claim 51, Graham teaches a system of organizing a collection of objects, comprising a user interface layout engine operable to perform operations comprising:

accessing a sequence of objects from the collection segmented into clusters each including multiple objects arranged in a respective sequence in accordance with context-related meta data associated with the objects (Page 5, Col. 2 Lines 35-47);

selecting for each object cluster at least two constituent objects representative of beginning and ending instances in the corresponding object sequence (Page 5, Col. 2 Lines 42-47); and

in a user interface, graphically presenting the selected representative objects of each cluster on a screen without graphically presenting representations of unselected ones of the constituent objects of the clusters (The process of creating summaries as discussed on Page 5, Col. 2 Lines 42-47 is displayed similarly as in FIG. 1a-b),

wherein the user interface layout engine presents the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters (Page 5, Col. 5 Lines 35-47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. [Time as Essence for Photo Browsing Through Personal Digital Libraries].

Regarding claim 20, Graham teaches all of the claimed subject matter as discussed above with respect to claim 19, Graham does not teach the step of ***processing each of the candidate objects sequentially beginning at a second end of the object sequence opposite the first end.*** However, clustering the image by iterating the sorted list at the other end of the list is not different from the first end. Therefore, it would have been obvious for one of

ordinary skill in the art at the time the invention was made to iterate the sorted list at the other end in order to cluster the images.

Claims 38 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. [Time as Essence for Photo Browsing Through Personal Digital Libraries].

Regarding claim 38, Graham teaches all of the claimed subject matter as discussed above with respect to claim 37, but does not teach ***objects of one cluster are merged into an adjacent cluster in response to dragging and dropping of the objects to be merged.***

However, the Calendar Browser as disclosed by Graham must be implemented in a computer system with a conventional operating system such as Window XP (Page 1, Col. 2 Lines 12-21). By using Window XP, an object can be dragged and dropped from a folder to another folder.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the feature of dragging and dropping of Window XP into the Calendar Browser in order to manipulate objects between folders.

Regarding claim 50, Graham teaches all of the claimed subject matter as discussed above with respect to claim 33, but does not disclose the step of ***graphically presenting at least one link to an object of a cluster arranged in a sequence in accordance with location-related meta data in a map format.***

However, as suggested by Graham, the location where a photograph was taken could also be extracted form the image files and introduces as a clustering criterion (Page 3, Col. 2 Line 36-Page 4, Col. 1 Line 2).

Thus by using location for clustering, the location is used to name a folder and the process of linking is similar to FIG. 1a-b. A folder naming by location indicates a map format.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG Q PHAM/
Primary Examiner
Art Unit 2168

May 15, 2008